

XP-002303438

(C) WPI/Derwent

AN - 2004-488141 [46]
 AP - ZA20010007995 20010928
 CPY - DBEE
 DC - A26 A35 A82 E11 E12 G02 L02 P54 P61
 DR - 0819-P 0819-S 0819-U 1247-P 1247-S 1247-U 1893-P 1893-S 1893-U
 FS - CPI;GMPI
 IC - B23B0/00 ; B24D0/00 ; C01B0/00
 IN - HERING N; KONETSCHNY C; RIEDEL R
 MC - A10-E05 A12-A03 E05-E02B E05-L01 E10-B01E E31-N05A E31-P06C E31-P06D
 E31-P06E E31-Q03 E34-C03 E35-K04 G02-A05 L02-F03 L02-F05A L02-J02C
 M3 - [01] B414 B720 B732 B744 B793 B799 B832 K0 L2 L210 M210 M211 M250 M283
 M320 M411 M510 M520 M530 M540 M620 M720 M782 M904 M905 N515 Q332 Q451
 R043 R045; RA0IZ2-K RA0IZ2-Q RA0IZ2-M RA0IZ2-P
 - [02] B114 B720 B740 B831 C106 C800 C802 C803 C805 C806 C807 M411 M720
 M782 M904 M905 M910 N515 Q332 Q451 R043 R045; R01247-K R01247-Q
 R01247-M R01247-P; 1247-P 1247-S 1247-U
 - [03] B114 B720 B730 B780 B832 C107 C800 C802 C803 C804 C806 C807 M411
 M720 M782 M904 M905 N515 Q332 Q451 R043 R045; RA2H1Q-K RA2H1Q-Q
 RA2H1Q-M RA2H1Q-P
 - [04] B114 B720 B730 B731 B740 B741 B831 C106 C107 C307 C550 C800 C802
 C803 C806 C807 M411 M720 M782 M904 M905 N515 Q332 Q451 R043 R045;
 RAB6LN-K RAB6LN-Q RAB6LN-M RAB6LN-P
 - [05] B105 B720 B730 B803 B831 C107 C800 C802 C803 C804 C806 C807 M411
 M720 M782 M904 M905 M910 N515 Q332 Q451 R043 R045; R01893-K R01893-Q
 R01893-M R01893-P; 1893-P 1893-S 1893-U
 - [06] B105 B720 B744 B780 B803 B833 C106 C800 C802 C803 C805 C806 C807
 M411 M720 M782 M904 M905 N515 Q332 Q451 R043 R045; R06458-K R06458-Q
 R06458-M R06458-P R20581-K R20581-Q R20581-M R20581-P
 - [07] A313 A940 C107 C520 C730 C801 C802 C803 C804 C806 C807 M411 M720
 M782 M904 M905 N515 Q332 Q451 R043 R045; R03135-K R03135-Q R03135-M
 R03135-P
 - [08] A674 A940 C106 C730 C801 C802 C803 C805 C806 C807 M411 M720 M782
 M904 M905 N515 Q332 Q451 R043 R045; R01943-K R01943-Q R01943-M R01943-P
 - [09] A422 A940 C106 C550 C730 C801 C802 C803 C805 C806 C807 M411 M720
 M782 M904 M905 N515 Q332 Q451 R043 R045; R04566-K R04566-Q R04566-M
 R04566-P
 - [10] A422 A940 C107 C520 C730 C801 C802 C803 C804 C806 C807 M411 M720
 M782 M904 M905 N515 Q332 Q451 R043 R045; R04537-K R04537-Q R04537-M
 R04537-P
 - [11] A422 A940 C107 C520 C730 C801 C802 C803 C804 C806 C807 M411 M720
 M782 M904 M905 N515 Q332 Q451 R043 R045; R03537-K R03537-Q R03537-M
 R03537-P
 - [12] H1 H101 H182 M280 M312 M321 M332 M342 M383 M391 M416 M620 M720
 M782 M904 M905 M910 N515 Q332 Q451 R043 R045; R00819-K R00819-Q
 R00819-M R00819-P; 0819-P 0819-S 0819-U
 - [13] A422 A960 C710 H1 H102 H181 M210 M212 M273 M282 M320 M411 M510
 M520 M530 M540 M620 M630 M720 M782 M904 M905 N515 Q332 Q451 R043 R045;
 RA072F-K RA072F-Q RA072F-M RA072F-P
 PA - (DBEE) DE BEERS IND DIAMONDS PTY LTD
 PN - ZA200107995 A 20020731 DW200446 C01B0/00 016pp
 PR - ZA20000005331 20001002
 XA - C2004-181988
 XIC - B23B-000/00 ; B24D-000/00 ; C01B-000/00
 XP - N2004-385029
 AB - ZA200107995 NOVELTY - Coating abrasive particles with a ceramic

Express Mail No. EV713810933US

(C) WPI/Derwent

coating comprises providing a mixture of a mass of abrasive particles and an organometallic polymer or its precursor(s) capable of being pyrolyzed to produce the ceramic coating; and applying heat to the mixture of the polymer and the mass of abrasive particles to cause the polymer to pyrolyze to form the ceramic coating on the abrasive particles.

- DETAILED DESCRIPTION - Coating abrasive particles with a ceramic coating comprises providing a mixture of a mass of abrasive particles and an organometallic polymer or its precursor(s) capable of being pyrolyzed to produce the ceramic coating; polymerizing the precursor to form the polymer; and applying heat to the mixture of the polymer and the mass of abrasive particles to cause the polymer to pyrolyze to form the ceramic coating on the abrasive particles. The ceramic coating is a carbide, a nitride, a carbonitride or a boride.
- USE - For coating abrasive particles having a particle size of 1-50 μm , e.g., diamond and cubic boron nitride, with a 20 nm - 2 μm thick ceramic coating provided that when the particles are diamond particles, the ceramic coating is not titanium carbide (claimed).
- ADVANTAGE - The method allows coating of fine abrasive particles with a thin ceramic coating without the problems of agglomeration.
- (Dwg.0/0)

CN - RA01Z2-K RA01Z2-Q RA01Z2-M RA01Z2-P R01247-K R01247-Q R01247-M
R01247-P RA2H1Q-K RA2H1Q-Q RA2H1Q-M RA2H1Q-P RAB6LN-K RAB6LN-Q
RAB6LN-M RAB6LN-P R01893-K R01893-Q R01893-M R01893-P R06458-K
R06458-Q R06458-M R06458-P R20581-K R20581-Q R20581-M R20581-P
R03135-K R03135-Q R03135-M R03135-P R01943-K R01943-Q R01943-M
R01943-P R04566-K R04566-Q R04566-M R04566-P R04537-K R04537-Q
R04537-M R04537-P R03537-K R03537-Q R03537-M R03537-P R00819-K
R00819-Q R00819-M R00819-P RA072F-K RA072F-Q RA072F-M RA072F-P
DRL - 1247-P 1247-S 1247-U 1893-P 1893-S 1893-U 0819-P 0819-S 0819-U
IW - COATING ABRASION PARTICLE DIAMOND CUBE BORON NITRIDE CERAMIC COATING
COMPRISE HEAT MIXTURE MASS ABRASION PARTICLE POLYMER PRECURSOR
CAPABLE
PYROLYSE
IKW - COATING ABRASION PARTICLE DIAMOND CUBE BORON NITRIDE CERAMIC COATING
COMPRISE HEAT MIXTURE MASS ABRASION PARTICLE POLYMER PRECURSOR
CAPABLE
PYROLYSE
INW - HERING N; KONETSCHNY C; RIEDEL R
NC - 001
OPD - 2000-10-02
ORD - 2002-07-31
PAW - (DBEE) DE BEERS IND DIAMONDS PTY LTD
TI - Coating of abrasive particles, e.g., diamond and cubic boron nitride,
with ceramic coating comprises heating mixture of mass of abrasive
particles and polymer or precursors capable of being pyrolyzed
A01 - [001] 2004 ; D01 Gm ; P0000 ; M9999 M2108 M2095 ; L9999 L2391 ;
L9999 L2108 L2095 ; L9999 L2506-R ; K9723
- [002] 2004 ; P1434 F82 Si 4A ; M9999 M2108 M2095 ; L9999 L2391 ;
L9999 L2108 L2095 ; L9999 L2506-R ; K9723
- [003] 2004 ; ND03 ; ND07 ; N9999 N7147 N7034 N7023 ; Q9999 Q6791 ;
Q9999 Q7114-R ; K9610 K9483 ; N9999 N6155 ; Q9999 Q6928

(C) WPI/Derwent

AN - 2003-490327 [46]

AP - KR20010053522 20010831

CPY - HYUN-N

DC - S03

FS - EPI

IC - G01N3/40

IN - KWON U C

MC - S03-F02A

PA - (HYUN-N) HYUNDAI MOTOR CO LTD

PN - KR2003018920 A 20030306 DW200346 G01N3/40 001pp

PR - KR20010053522 20010831

XIC - G01N-003/40

AB - KR2003018920 NOVELTY - A system and a method for checking hardness of a crank shaft are provided to allow for a real time monitoring of measurement data, while permitting the feedback operation for the fault to be rapidly carried out.

- DETAILED DESCRIPTION - A system comprises an orthogonal robot(2) equipped with an ultrasonic hardness sensor(4) for sensing the hardness of each pin journal of a crank shaft(6) and disposed in a crank shaft production line; a measurement computer(10) for storing measurement value for each part obtained from the signal transmitted from the ultrasonic hardness sensor and filtered through a signal controller(8); and an analysis computer(12) for constructing a database from the data transmitted from the measurement computer and performing a statistical analysis on the data.

- (Dwg.1/10)

IW - SYSTEM METHOD CHECK HARD CRANK SHAFT INTERNAL COMBUST ENGINE

IKW - SYSTEM METHOD CHECK HARD CRANK SHAFT INTERNAL COMBUST ENGINE

INW - KWON U C

NC - 001

OPD - 2001-08-31

ORD - 2003-03-06

PAW - (HYUN-N) HYUNDAI MOTOR CO LTD

TI - System and method for checking hardness of crank shaft of internal combustion engine